

Title (en)

PROCESS FOR PURIFYING A GASEOUS EFFLUENT

Title (de)

VERFAHREN ZUR REINIGUNG EINES GASFÖRMIGEN ABSTROMS

Title (fr)

PROCÉDÉ D'ÉPURATION D'UN EFFLUENT GAZEUX

Publication

**EP 3541496 B1 20210310 (FR)**

Application

**EP 17804829 A 20171110**

Priority

- FR 1661212 A 20161118
- EP 2017078950 W 20171110

Abstract (en)

[origin: WO2018091379A1] The present invention relates to a process for purifying a gaseous effluent containing at least one volatile organic compound (VOC), said process comprising at least the steps consisting in: (a) having at least one deep eutectic solvent (DES) comprising (aa) at least one compound of formula (I) R1R2R3R4Y<sup>+</sup> X<sup>-</sup>; and (bb) at least one compound (II) which is a hydrogen bond donor capable of forming a complex with X<sup>-</sup>; and (b) bringing said deep eutectic solvent from step (a) into contact with said gaseous effluent to be purified under conditions favourable to the absorption of said VOC by said DES. The present invention also relates to the use of at least one deep eutectic solvent for absorbing at least one volatile organic compound contained in a gaseous effluent and also a composition comprising at least one volatile organic compound and at least one deep eutectic solvent.

IPC 8 full level

**B01D 53/14** (2006.01)

CPC (source: EP)

**B01D 53/1487** (2013.01); **B01D 53/1493** (2013.01); **B01D 2252/30** (2013.01); **B01D 2252/504** (2013.01); **B01D 2257/2064** (2013.01); **B01D 2257/7022** (2013.01); **B01D 2257/7027** (2013.01); **B01D 2257/704** (2013.01); **B01D 2257/708** (2013.01)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**WO 2018091379 A1 20180524**; CN 110114129 A 20190809; EP 3541496 A1 20190925; EP 3541496 B1 20210310; FR 3058905 A1 20180525; FR 3058905 B1 20200228

DOCDB simple family (application)

**EP 2017078950 W 20171110**; CN 201780081007 A 20171110; EP 17804829 A 20171110; FR 1661212 A 20161118